

Application Serial No. 10/581,231
Reply to office action of June 12, 2008

PATENT
Docket:CU-4813

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

Claims 1-18 are pending before this amendment. By the present amendment, claims 2-4, 8, and 11-18 are canceled without prejudice; and claims 1, 6 and 10 have been amended. No new matter has been added.

Regarding the amendments into claims 1 and 7, the subject matter from now canceled claims 3-4 has been incorporated into claims 1 and 7. Support for feature that "the SDH tributary processing unit and the at least two service processing units are disposed on one board" added to claims 1 and 7 can be found in, for example, page 5, lines 12-14, page 8, lines 6-7 and Figure 4 of the originally filed specification.

In the office action (page 2), claims 3 and 13-16 stands objected to due to an informality.

Regarding claim 6, the applicants have subsequently followed the examiner's suggestion and replaced "the cross module" with "a cross module" and therefore removed the basis for this objection.

Regarding claims 13-16, the applicants have subsequently canceled these claims without prejudice and therefore removed the basis for this objection.

Accordingly, the examiner is respectfully requested to withdraw this objection.

In the office action (page 2), claims 6 and 15-16 stand rejected under 35 U.S.C. § 112, ¶2 as being indefinite.

Regarding claim 6, the applicants have subsequently followed the examiner's suggestion and replaced "the cross module" with "a cross module" and therefore

Application Serial No. 10/581,231
Reply to office action of June 12, 2008

PATENT
Docket:CU-4813

removed the basis for this rejection.

Regarding claims 15-16, the applicants have subsequently canceled these claims without prejudice and therefore removed the basis for this objection.

Accordingly, the examiner is respectfully requested to withdraw this rejection

In the office action (page 3), claims 1, 2, 4, and 11 stands rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No.6,765,928 (Sethuram). Also in the office action (page 5), claims 3, 5-10 and 12-18 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sethuram in view of U.S. Patent No. 6,798,779 (Shimbashi). The "et al." suffix is omitted in a reference name.

The applicants respectfully disagree and submit that the claims, as they now stand, are in condition for allowance.

Sethuram is unlike the presently claimed invention. Sethuram at most discloses that provisioning information is used to automatically insert information from a corresponding service at appropriate time slots within the SONET/SDH data stream and to recover and segregate information embedded within the SONET/SDH data stream for each service (See e.g., column 6, lines 52-58). However, Sethuram does not disclose or suggest demultiplexing the service signals corresponding to different service processing units according to the different time slots. Therefore, for this reason alone, Sethuram is unlike the presently claimed invention.

The examiner even acknowledges in the office action at page 5 in lines 13-17 that Sethuram does not disclose

"...the synchronous digital hierarchy tributary module supporting multiple service processing, wherein the tributary module further includes a

Application Serial No. 10/581,231
Reply to office action of June 12, 2008

PATENT
Docket:CU-4813

multiple service cross processing unit which is used to implement interconnection among different services, each service processing unit being connected to a local interface through the multiple service cross processing unit."

Therefore, for these reasons alone, Sethuram is very much unlike the presently claimed invention.

Shimbashi is also unlike the presently claimed invention. At most Shimbashi discloses a STS switching module 23 that receives a signal from one of the shared inter-module interfaces 22-1 thru 22-3 and crossconnects the signal at an STS-1 level (column 6, lines 22-27). It can be understood by those skilled in the art that the crossconnection of the solution of Shimbashi et al. is implemented at the SDH side and depending upon the cross of STS/VT time slots, which is quite different from the solution of presently claimed invention. In particular the solution of amended claim 1 in which the cross is implemented at the service interface side. Further the cross of the presently claimed invention is independent of the time slots because the services have already been separated out from the time slots when reaching the multiple service cross processing unit as limited in amended claim 1. As illustrated in Figure 4 and supported inter alia in the present application, the RPR (Resilience Packet Ring) service processing unit and an Ethernet service processing unit are interconnected via a two-level switch unit (i.e. the multiple service cross processing unit), where the RPR service, for example, is unmapped first and then a match is performed between the RPR service and other service processing units to find a matching service processing unit, for example, the Ethernet service processing unit. Therefore for these reasons alone Shimbashi is also unlike the presently claimed invention.

Application Serial No. 10/581,231
Reply to office action of June 12, 2008

PATENT
Docket:CU-4813

Yet another difference between the presently claimed invention and that of Sethuram and Shimbashi, is that neither of these cited references teach or even hint at

—the SDH tributary processing unit and the at least two service processing units are disposed on one board—

which is now required in claim 1. Therefore, for this reason alone, Sethuram and Shimbashi are unlike the presently claimed invention.

Still another difference between the presently claimed invention and that of Sethuram and Shimbashi, is that neither of these cited references teach or even hint at

— the **tributary module** further includes a multiple service cross processing unit which is used to implement interconnection among different services, each service processing unit being connected to a local interface through the multiple service cross processing unit --

which is also now required in claim 1. Specifically, as now required in amended claim 1, with the multiple service cross processing unit, a service can be transported from one service processing unit to another, without using external network line or equipment and without needing the service to be downloaded through a service interface module of one service processing unit first and then to be uploaded through a service interface module of another service processing unit, thereby reducing the number of the service interface modules and thus the cost of the SDH tributary module. Therefore, for this reason alone, Sethuram and Shimbashi are unlike the presently claimed invention.

Still yet another difference between the presently claimed invention and that of Sethuram and Shimbashi, is that neither of these cited references teach or even hint at

—the SDH tributary processing unit separates out the service signals corresponding to different service processing units, according to different time slots corresponding to the SDH signals of different services—

Application Serial No. 10/581,231
Reply to office action of June 12, 2008

PATENT
Docket:CU-4813

which is also now required in claim 1. Specifically, with the SDH tributary processing unit that has the function of demultiplexing the service signals (that are multiplexed in different time slots of the SDH signal) corresponding to different service processing units according to the different time slots, the cross module of the SDH equipment node that implements the demultiplexing function in the prior art can be remarkably simplified. Therefore, for this reason alone, Sethuram and Shimbashi are unlike the presently claimed invention.

Finally, it can be found that the feature that "the SDH tributary processing unit and the at least two service processing units are disposed on one board" in amended claim 1 is neither disclosed nor suggested by either Sethuram and Shimbashi. Therefore, for this reason alone, Sethuram and Shimbashi are unlike the presently claimed invention.

Since it is well settled that a reference must teach "each and every" limitation to anticipate a claimed invention, then Sethuram cannot support an anticipation rejection to the presently claimed invention. Accordingly, the applicants respectfully request that the examiner withdraw this anticipation rejection.

Since it is also well settled that the cited references must teach or suggest all of the claimed limitations to render obvious a claimed invention then Sethuram and Shimbashi, in whole or in combination, cannot support an obviousness rejection to the presently claimed invention. Accordingly, the applicants respectfully request that the examiner withdraw this obviousness rejection.

For the reasons set forth above, the applicants respectfully submit that claims 1, 5-7, and 9-10, now pending in this application, are in condition for allowance over the

Application Serial No. 10/581,231
Reply to office action of June 12, 2008

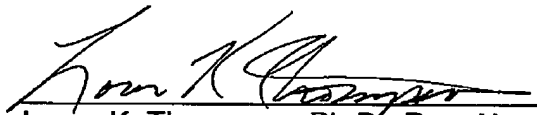
PATENT
Docket: CU-4813

cited references. Accordingly, the applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter. The applicants reserve the right to present the cancelled withdrawn claims in a divisional application.

This amendment is considered to be responsive to all points raised in the office action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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